

**REMARKS**

Reconsideration of the present application is respectfully requested. Claims 1, 4, and 8-11 have been amended, claim 12 has been added, and claims 2-3 have been canceled. As such, claims 1 and 4-12 are currently pending in the present application.

Claims 1, 2, 4, 8, and 9 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,047,167 to Yamashita (“Yamashita”). Claim 1 recites, in part, the feature of “providing a gain component to the feedback loop, the additional gain component proportional to the control signal.” By providing a gain component to the feedback loop, as illustrated in Figure 3 of the present application, some overall gain is present, even at very low and high output power levels. By providing gain at very low and high output power levels, degradation of the switching spectrum is alleviated.

In contrast, Yamashita teaches a negative feedback loop for providing a control voltage to the power amplifying circuit. The control voltage corresponds to an amplification factor for use in transmitting the signal from the transmission VCO. *See Yamashita, col. 3, lines 1-11.* Yamashita does not teach or suggest manipulating the feedback loop in any way. As such, Yamashita does not teach or suggest providing a gain component to the feedback loop as recited in claim 1. As shown in Figure 4b of Yamashita,  $V_{out}$  approaches infinity, thereby causing degradation in the output switching spectrum. Applicants respectfully submit that claim 1 distinguishes over Yamashita and request that the §102 rejection of claim 1 be withdrawn.

Claim 8 recites, in part, the feature of “additional circuitry for adding a gain component to said feedback loop, the gain component for maintaining the feedback loop in an active state at all times.”

As set forth above, Yamashita does not teach or suggest adding a gain component to the feedback loop. Also, Yamashita does not teach maintaining the feedback loop in an active state at all times. As evidenced by Figure 4b of Yamashita, the  $V_{out}$  approaches infinity, and therefore the

switching spectrum becomes degraded. Applicants submit that claim 8 distinguishes over Yamashita and request that the §102 rejection of claim 8 be withdrawn.

Claim 2 has been canceled, thereby rendering the rejection of this claim moot. Claims 4 and 9 are directly dependent from one of claim 1 or claim 8 and should distinguish over Yamashita for at least the same reasons as stated above.

Claims 1-11 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,370,364 to Liimatainen (“Liimatainen”). Claim 1 recites, in part, the feature of “providing a gain component to the feedback loop, the additional gain component proportional to the control signal.” Claim 8 recites, in part, the feature of “additional circuitry for adding a gain component to said feedback loop, the gain component for maintaining the feedback loop in an active state at all times.” By providing a gain component to the feedback loop, as illustrated in Figure 3 of the present application, some overall gain is present, even at very low and high output power levels. By providing gain at very low and high output power levels, degradation of the switching spectrum is alleviated.

In contrast, Liimatainen teaches a loop error amplifier for providing a input gain signal to the voltage controlled amplifier. The input gain signal controls the output of the voltage controlled amplifier. *See* Liimatainen, col. 6, lines 37-56. Liimatainen does not teach or suggest providing a gain component to the feedback loop as recited in claims 1 and 8. Similar to Yamashita, the apparatus of Liimatainen utilizes a control loop that may become saturated. As saturation occurs, the output switching spectrum degrades. Applicants respectfully submit that claims 1 and 8 distinguish over Liimatainen and request that the §102 rejection of claims 1 and 8 be withdrawn.

Claims 2-3 have been canceled, thereby rendering the rejection of these claims moot. Claims 4-7 and 9-12 are either directly or indirectly dependent from one of claim 1 or claim 8 and should distinguish over Liimatainen for at least the same reasons as stated above. Applicants respectfully request that the §102 rejection of claims 4-7 and 9-12 be withdrawn.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Dated: July 14, 2004

Respectfully submitted,

By  
Ashley N. Moore

Registration No.: 51,667  
JENKENS & GILCHRIST, A PROFESSIONAL  
CORPORATION  
1445 Ross Avenue, Suite 3200  
Dallas, Texas 75202  
(214) 855-4500  
Attorneys For Applicant